

## EAST Search History

| Ref # | Hits    | Search Query  | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|---------|---|---|------------------|---------|------------------|
| S1    | 4281158 | aligned level coplanar height   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/08/15 16:51 |
| S2    | 2533453 | hard longitudinal barkhausen<br>biasing popcorn (domain near2<br>control) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/08/15 16:51 |
| S3    | 2955153 | free sensing ferromagnetic  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/08/15 18:48 |
| S4    | 4281158 | aligned level coplanar height   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/08/15 18:51 |
| S5    | 2533453 | hard longitudinal barkhausen<br>biasing popcorn (domain near2<br>control) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/08/15 18:51 |
| S6    | 2955153 | free sensing ferromagnetic  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/08/15 18:52 |
| S7    | 521104  | S4 and S5 and S6  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/08/15 18:48 |
| S8    | 20203   | S4 same S5 same S6  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/08/15 18:49 |
| S9    | 4933    | S4 with S5 with S6  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | OFF     | 2006/08/15 18:51 |

## EAST Search History

|     |         |  |   |    |     |                  |
|-----|---------|--|---|----|-----|------------------|
| S10 | 18646   | underlayer under?layer   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2006/08/15 18:51 |
| S11 | 19664   | underlayer under?layer   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/08/15 18:51 |
| S12 | 4553621 | aligned level coplanar height  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/08/15 18:51 |
| S13 | 2534992 | hard longitudinal barkhausen<br>biasing popcorn (domain near2<br>control)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/08/15 18:51 |
| S14 | 2966987 | free sensing ferromagnetic   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/08/15 18:52 |
| S15 | 5098    | S12 with S13 with S14  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/08/15 18:52 |
| S16 | 29      | S11 same S15   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/08/15 19:39 |
| S17 | 8       | (US-20060056112-\$ or<br>US-20040145836-\$ or<br>US-20030030947-\$ or<br>US-20020064006-\$ or<br>US-20010038927-\$ or<br>US-20010014000-\$).did. or<br>(US-6760200-\$ or US-6608740-\$).<br>did. | US-PGPUB;<br>USPAT                                      | OR | OFF | 2006/08/15 20:11 |
| S18 | 2861090 | slope inclin\$6 angle  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2007/01/11 15:48 |

## EAST Search History

|     |         |                    |   |    |    |                  |
|-----|---------|--------------------|---|----|----|------------------|
| S19 | 1132221 | junction abut\$5   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 20:18 |
| S20 | 66610   | slant              | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 20:18 |
| S21 | 388801  | S19 and (S18 S20)  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 20:18 |
| S22 | 2834974 | degree             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/11 15:48 |
| S23 | 160365  | S21 and S22        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 20:18 |
| S24 | 119814  | S19 same (S18 S20) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 20:18 |
| S25 | 63193   | S19 with (S18 S20) | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 20:21 |
| S26 | 12524   | S24 same S22       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 20:19 |
| S27 | 2533453 | S5                 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 20:19 |
| S28 | 5461    | S25 same S22       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 20:21 |

## EAST Search History

|     |      |                    |   |    |    |                  |
|-----|------|--------------------|---|----|----|------------------|
| S29 | 3766 | S25 with S22       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 20:20 |
| S30 | 645  | S5 same S28        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 20:38 |
| S31 | 371  | S5 same S29        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 20:22 |
| S32 | 240  | S5 with S29        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 20:22 |
| S33 | 717  | (360/324.12).ccls. | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 20:38 |
| S34 | 527  | (360/324.11).ccls. | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 20:38 |
| S35 | 1110 | S33 S34            | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/11 15:49 |
| S36 | 0    | "09"?697659        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 21:13 |
| S37 | 7    | ???697659          | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/15 21:13 |

## EAST Search History

|     |         |  |   |    |     |                  |
|-----|---------|--|---|----|-----|------------------|
| S38 | 29      | (US-20060056112-\$ or<br>US-20040145836-\$ or<br>US-20030030947-\$ or<br>US-20020064006-\$ or<br>US-20010038927-\$ or<br>US-20010014000-\$ or<br>US-20050007707-\$ or<br>US-20040141259-\$ or<br>US-20040114284-\$ or<br>US-20030227722-\$ or<br>US-20020196590-\$ or<br>US-20010012188-\$ or<br>US-20060154559-\$ or<br>US-20060164766-\$ or<br>US-20060044705-\$ or<br>US-20050219772-\$ or<br>US-20050024796-\$ or<br>US-20050013061-\$ or<br>US-20040075960-\$ or<br>US-20030179518-\$ or<br>US-20030058586-\$ or<br>US-20030011947-\$).did. or<br>(US-6760200-\$ or US-6608740-\$<br>or US-7035059-\$ or US-6992866-\$<br>or US-6805519-\$ or US-6879474-\$<br>or US-6636396-\$).did. | US-PGPUB;<br>USPAT                                      | OR | OFF | 2006/08/16 14:30 |
| S39 | 1       | "6668433".pn.  | US-PGPUB;<br>USPAT                                      | OR | OFF | 2006/08/16 15:35 |
| S40 | 1       | "6668443".pn.  | US-PGPUB;<br>USPAT                                      | OR | OFF | 2006/08/16 15:35 |
| S41 | 2861090 | slope inclin\$6 angle  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/08/16 15:49 |
| S42 | 1132221 | junction abut\$5   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/08/16 15:49 |
| S43 | 66610   | slant  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/08/16 15:49 |
| S44 | 2834974 | degree   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/08/16 15:49 |

## EAST Search History

|     |         |  |   |    |    |                  |
|-----|---------|--|---|----|----|------------------|
| S45 | 147090  | (S44 S43 S41) same S42                         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/16 15:50 |
| S46 | 74050   | (S44 S43 S41) with S42                         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/16 15:50 |
| S47 | 187260  | ("360"/\$ "369"/\$ "720"/\$<br>29/603\$).ccls. | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/11 15:49 |
| S48 | 1545    | S46 and S47                                    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/16 15:51 |
| S49 | 11      | CIP and S48                                    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/16 15:51 |
| S50 | 24      | CPP and S48                                    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/08/16 15:51 |
| S51 | 1146097 | slope inclin\$6                                | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/11 15:48 |
| S52 | 4425030 | degree angle                                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/11 15:48 |
| S53 | 299699  | S51 with S52                                   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/11 15:48 |
| S54 | 791     | (360/324.12).ccls.                             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/11 15:49 |

## EAST Search History

|     |        |  |   |    |    |                  |
|-----|--------|--|---|----|----|------------------|
| S55 | 566    | (360/324.11).ccls.                             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/11 15:49 |
| S56 | 1203   | S54 S55  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/11 15:49 |
| S57 | 190369 | ("360"/\$ "369"/\$ "720"/\$<br>29/603\$).ccls. | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/11 15:49 |
| S58 | 80     | S53 and S56                                    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/11 15:49 |
| S59 | 5850   | S53 and S57                                    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2007/01/11 15:49 |

## EAST Search History

|     |    |   |                    |    |     |                  |
|-----|----|---|--------------------|----|-----|------------------|
| S60 | 38 | (US-20040114284-\$ or<br>US-20040075960-\$ or<br>US-20030227722-\$ or<br>US-20030179518-\$ or<br>US-20010012188-\$ or<br>US-20030011947-\$ or<br>US-20030058586-\$ or<br>US-20040141259-\$ or<br>US-20020196590-\$ or<br>US-20010014000-\$ or<br>US-20030030947-\$ or<br>US-20040145836-\$ or<br>US-20060056112-\$ or<br>US-20050013061-\$ or<br>US-20050007707-\$ or<br>US-20050219772-\$ or<br>US-20060164766-\$ or<br>US-20020064006-\$ or<br>US-20010038927-\$ or<br>US-20060044705-\$ or<br>US-20060067009-\$ or<br>US-20060154559-\$ or<br>US-20050024796-\$ or<br>US-20060209474-\$ or<br>US-20020064005-\$).did. or<br>(US-6805519-\$ or US-6992866-\$<br>or US-7035059-\$ or US-6879474-\$<br>or US-6608740-\$ or US-6760200-\$<br>or US-6636396-\$ or US-6668443-\$<br>or US-7002781-\$ or US-6731479-\$<br>or US-6714388-\$ or US-6636395-\$<br>or US-6385018-\$).did. | US-PGPUB;<br>USPAT | OR | OFF | 2007/01/11 16:19 |
| S61 | 7  | (US-20030030947-\$ or<br>US-20030011947-\$ or<br>US-20010012188-\$).did. or<br>(US-6760200-\$ or US-6731479-\$<br>or US-6714388-\$ or<br>US-6636395-\$).did.  | US-PGPUB;<br>USPAT | OR | OFF | 2007/01/11 16:20 |